

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A method of detecting the presence of a neurotoxin in screening a human subject ~~having or at risk of having a neurological disorder~~ comprising, analyzing a tissue sample from the subject to determine the presence of  $\beta$ -N-methylamino-L-alanine (BMAA) or a BMAA derivative, wherein the presence of BMAA or a BMAA derivative is indicative of the presence of a neurotoxin ~~associated with the neurological disorder~~.

2. (Cancelled)

3. (Cancelled)

4. (Cancelled)

5. (Previously presented) The method of Claim 1, wherein protein-bound BMAA is analyzed.

6. (Original) The method of Claim 5, wherein free BMAA is also analyzed.

7. (Original) The method of Claim 1, wherein the subject has symptoms of a neurological disorder.

8. (Original) The method of Claim 1, wherein the subject is asymptomatic for a neurological disorder.

9. (Original) The method of Claim 1, wherein the subject has been identified as being at risk for developing a neurological disorder.

10. (Currently amended) The method of Claim 1, wherein the presence of a detectable level of BMAA or a BMAA derivative is associated with ~~indicates~~ a neurological disorder.

11. (Currently amended) The method of Claim 10, wherein the neurological disorder is a neurofibrillary tangle disorder (NFT disorder).

12. (Original) The method of Claim 11, wherein the neurological disorder is amyotrophic lateral sclerosis-Parkinsonism dementia complex (ALS-PDC).

13. (Original) The method of Claim 11, wherein the neurological disorder is Alzheimer's disease.

14. (Original) The method of Claim 11, wherein the neurological disorder is progressive supranuclear palsy.
15. (Currently amended) The method of Claim 10, wherein the neurological disorder is a movement disorder.
16. (Original) The method of Claim 15, wherein the movement disorder is Parkinson's disease.
17. (Currently amended) The method of Claim 10, wherein the neurological disorder is a motor neuron disease.
18. (Original) The method of Claim 17, wherein the motor neuron disease is amyotrophic lateral sclerosis (ALS).
19. (Currently amended) The method of Claim 1, wherein the ~~screening~~ method predicts the likelihood of developing a neurological disorder ~~disease~~.
20. (Original) The method of Claim 19, further wherein the method predicts the latency period prior to onset of the neurological disorder.
21. (Currently amended) The method of Claim 19, further wherein the ~~screening~~ method predicts the severity of the neurological disorder.
22. (Original) The method of Claim 1, wherein the tissue sample is neurological tissue.
23. (Original) The method of Claim 22, wherein the neurological tissue is associated with the central nervous system (CNS).
24. (Original) The method of Claim 23, wherein the tissue is brain tissue.
25. (Original) The method of Claim 23, wherein the tissue is cerebral-spinal fluid (CSF).
26. (Original) The method of Claim 22, wherein the neurological tissue is associated with the peripheral nervous system (PNS).
- ~~2728~~. (Currently amended) The method of Claim 1, wherein the tissue is non-neurological tissue.
- ~~2829~~. (Currently amended) The method of Claim ~~2728~~, wherein the tissue is keratinous tissue.
- ~~2930~~. (Currently amended) The method of Claim ~~2829~~, wherein the tissue is hair.

3031. (Currently amended) The method of Claim 2829, wherein the tissue is skin.
3132. (Currently amended) The method of Claim 2829, wherein the tissue is nail.
3233. (Currently amended) The method of Claim 3132, wherein the nail is a fingernail.
3334. (Currently amended) The method of Claim 3132, wherein the nail is a toenail.
- 3435-.3738. (Cancelled)
3839. (Currently amended) The method of Claim 2728, wherein the tissue is non-keratinous tissue.
3940. (Currently amended) The method of Claim 3839, wherein the tissue is blood.
4041. (Currently amended) The method of Claim 3940, wherein the tissue is serum.
4142. (Currently amended) The method of Claim 3839, wherein the tissue is saliva.
4243. (Currently amended) The method of Claim 3839, wherein the tissue is urine.
- 43-75 44-76. (Cancelled)